

may be cemented to the inner, by Canada balsam; or left free, to admit of adjustment to suit different observers. Prisms of other form, with due arrangement, may be substituted.

I find the method is applicable with equal advantage to every grade of good lens, from Spencer's best sixteenth, to a common three-inch magnifier; with or without oculars or erecting eye-pieces; and with a great enhancement of penetrating and defining power. It gives the observer perfectly correct views, in length, breadth and *depth*, whatever power he may employ. Objects are seen holding their true relative positions and wearing their real shapes. A curious exception must be made. In viewing opaque solid bodies, with one eye-piece to each eye, depression appears as elevation, and elevation as depression, forming a singular illusion. For instance, a metal spherule appears as a glass ball silvered on the under side; and a crystal of galena, like an empty box. By the additional use of erecting eye-pieces, the images all become normal and natural. Match drawings of any solid object, made from each eye-piece, by the aid of the camera lucida, when properly placed in the common stereoscope, appear to stand out in natural relief. These, if engraved and printed in the proper position with respect to each other, might find an appropriate place in books on the arts and sciences.

In constructing binocular eye-glasses, I use, for lightness and economy, four pieces of common looking-glass, instead of prisms.

With these instruments, the microscopic dissecting knife can be exactly guided. The watch-maker and artist can work under the binocular eye-glass, with certainty and satisfaction. In looking at microscopic animal tissues, the single eye may perhaps behold a confused amorphous or nebulous mass, which the pair of eyes instantly shapes into delicate superimposed membranes, with intervening spaces, the thickness of which can be correctly estimated. Blood-corpuscles, usually seen as flat disks, loom out as oblate spheroids. In brief, the whole microscopic world, as thus displayed, acquires a ten-fold greater interest, in every phase exhibiting, in a new light, beauty and symmetry indescribable.—*Silliman's American Journal*, January 1853.

University of La., New Orleans, Oct. 1, 1852.

#### ON THE GENUS BIFRONTIA.

Mr. MacAndrew has lately discovered *Bifrontia Zanclæa* of Philippi, in a recent state, off the coast of Madeira, and has presented specimens of it to the British Museum. It has a high conical operculum, with a spiral ridge like the genus *Torinia* (*Solarium variegatum*, Lamk.), which supports Dr. Philippi's opinion that this genus is probably allied to *Solarium*, Moll. Sicil. ii. 225.

In the older specimens the outer whorls are separated from the others, like the fossil species of *Bifrontia* found in the Paris formation.

The animal is pellucid: and when it crawled up the glass, the shell laid on one side, so that its flat side nearly touched the glass.—  
J. E. GRAY.